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EUROPEAN PATENT APPLICATION

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(30) Priority: 31.01.2000 US 178968 P

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(54) **Use of prostaglandin (PGE2) receptor 4 (EP4) selective agonists for the treatment of acute and chronic renal failure**

(57) This invention is directed to methods and compositions of treating acute or chronic renal failure or dys-

function, or conditions caused thereby comprising administering prostaglandin agonists, which are EP₄ receptor selective prostaglandin agonists.

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PARTIAL EUROPEAN SEARCH REPORT

Application Number

which under Rule 45 of the European Patent Convention shall be considered, for the purposes of subsequent proceedings, as the European search report

01 30 0690

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
E	EP 1 097 922 A (ONO PHARMACEUTICAL CO) 9 May 2001 (2001-05-09) * page 1, line 28-43 * * page 19, line 11-46 * * page 50, line 26-55 * * claim 1 * -----	1,2,8	A61K31/4015 A61P13/12
E	EP 1 080 728 A (TORAY INDUSTRIES) 7 March 2001 (2001-03-07) * page 2, line 18-22 * * page 4, line 41 - page 5, line 1 * * claim 3 * -----	1,2,8	
E	EP 1 114 816 A (ONO PHARMACEUTICAL CO) 11 July 2001 (2001-07-11) * page 2, line 36-44 * * page 39, line 42 - page 40, line 10 * * page 87, line 28-44 * * claim 1 * -----	1,2,8	
A	GB 1 556 569 A (PFIZER) 28 November 1979 (1979-11-28) * page 4, line 28-30 * * page 4, line 55 - page 6, line 29 * -----	1-10	TECHNICAL FIELDS SEARCHED (Int.Cl.7) A61K

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INCOMPLETE SEARCH

The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC to such an extent that a meaningful search into the state of the art cannot be carried out, or can only be carried out partially, for these claims.

Claims searched completely:

Claims searched incompletely:

Claims not searched:

Reason for the limitation of the search:
see sheet C

Place of search

Date of completion of the search

Examiner

THE HAGUE

9 November 2001

Bazzanini, R

CATEGORY OF CITED DOCUMENTS

- X: particularly relevant if taken alone
Y: particularly relevant if combined with another document of the same category
A: technological background
O: non-written disclosure
P: intermediate document

- T: theory or principle underlying the invention
E: earlier patent document, but published on, or after the filing date
D: document cited in the application
I: document cited for other reasons
A: member of the same patent family, corresponding document

EP 1 132 086 A3 (2001-05-09)

European Patent
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SHEET C

Application Number

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Claim(s) searched completely:
5,7

Claim(s) searched incompletely:
1,2,3,4,6,8-10

Reason for the limitation of the search:

Present claims 1,2,4,6,8-10 relate to compounds defined by reference to a desirable characteristic or property, namely EP4 receptor selective agonism.

The claims cover all compounds having this characteristic or property, whereas the application provides support within the meaning of Article 84 EPC and disclosure within the meaning of Article 83 EPC for only a very limited number of such compound. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 84 EPC). An attempt is made to define the compounds by reference to its pharmacological profile.

Furthermore the term "prodrug" used in claim 1, 3 and 8 is vague and unclear and leaves in doubt as to the meaning of the technical feature (i.e. the compound) to which it refers. The lack of clarity is such as to render a meaningful complete search impossible.

Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those compounds having general formula as depicted in claim 3 (disregarding the prodrugs thereof) and the compounds mentioned in claims 5 and 7, with due regard to the general idea underlying the invention.

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DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (int.Cl.7)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
A	<p>ZORETIC P.A. ET AL: "Synthesis of (E)-7-''2-'4-(m-trifluoromethylphenoxy)-3-alpha- and 3-beta-hydroxy-1-butenyl-5-oxo-1-pyrrolidinylheptanoic acids"</p> <p>JOURNAL OF HETEROCYCLIC CHEMISTRY, vol. 20, 1983, pages 465-466, XP002182343</p> <p>* page 465, left-hand column, paragraphs 1,2 *</p> <p>* Formula 3 and 4 *</p> <p>-----</p>	1-10	
			TECHNICAL FIELDS SEARCHED (int.Cl.7)

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EPC Data Banks

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